

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF TWO NEW SKUNKS OF THE
GENUS *MEPHITIS*.
BY OUTRAM BANGS.

***Mephitis spissigrada* sp. nov.**

Type from Sumas, B. C. No. 3699, ♀ adult, coll. of E. A. and O. Bangs. Collected September 30, 1895, by Allan C. Brooks.

General characters.—Externally, with much the general appearance of *M. hudsonica* and *M. occidentalis*, large size and long tail, peculiar to all the skunks of this group. Heel densely hairy; skull differing from that of either *M. hudsonica* or *M. occidentalis* in having a very short palate, the end falling at or forward of a line across posterior alveoli of last upper molars; palate ending in an even curve (like that of *M. hudsonica* and *M. mephitica mephitica*) without reëntrant notch (as in *M. occidentalis*) or median spine (as in *M. mephitica scrutator* and *M. elongata*).

Color.—As usual in the *hudsonica* group. Black all over, with white frontal stripe, nuchal patch, and lateral stripes extending from nuchal patch to and down sides of tail; the long white hairs of sides of tail overlie the shorter hairs and fall to the end of the blunt brush-like terminus of the tail.

Measurements.

	Total length.	Tail vert.	Hind foot.
No. 3699, type, ♀ adult.....	640	240	75
No. 3700, topotype, ♀ adult.....	610	230	75
No. 5548, topotype, ♂ old adult.....	...	270	85

Skull.—Type, ♀ ad. Basal length 68; occipito nasal length 69.6; zygomatic breadth 49.6; mastoid breadth 41; greatest length of single half of mandible 50.

Cranial characters.—Skull similar to that of *M. hudsonica* and *M. occidentalis*, but differing from both these in being shorter and broader and having shorter rostral region and shorter palate, the end of palate falling at or anterior to a line drawn across posterior alveoli of last upper molars

(in *M. hudsonica* and *M. occidentalis* the end of the palate falls well behind such a line). From *M. occidentalis* it differs still farther in having larger, rounder audital bullæ and the palate ending in an even curve (*M. occidentalis* having a reëntrant median notch), and from *M. hudsonica* in having much shorter, broader rostrum, wider nasals, and wider, flatter frontals.

Remarks.—Mr. Allan C. Brooks has sent me three skins and skulls and one extra skull (♂ old ad.) of this form, all collected by himself at Sumas, British Columbia. The species belongs to the very distinct *hudsonica* group, but seems different enough from either *hudsonica* or *occidentalis* to merit separation, though it may intergrade with both of them.

Mephitis avia sp. nov.

Type from San Jose, Illinois, No. 5747, ♂ adult, coll. of E. A. & O. Bangs. Collected March 10, 1897; skinned, measured, and sexed by H. H. & C. S. Brimley.

General characters.—Size rather small; tail very short; foot of medium length; heel clothed with long hairs along the sides, a narrow medial strip naked; colors as usual. Skull peculiar.

Color.—Black all over, except white frontal stripe, nuchal patch, and two lateral stripes extending back from nuchal patch. Tail very short and bushy, black externally, most of the hairs white at base.

Measurements.

	Total length.	Tail vert.	Hind foot.
No. 5747, type, ♂ adult.....	675	190	65
No. 5783, topotype, ♂ adult.	607	177	65

Skull.—The type ♂ adult. Basal length, 62; occipito nasal length 65; zygomatic breadth 44.6; mastoid breadth 35.4; greatest length of single half of mandible 46.4.

Cranial characters.—Skull short and heavy; highly arched in frontal region; palate broad at end and without median spine; zygoma broadly expanded at posterior end, then slanting abruptly forward (very different in shape from the more even curve seen in *M. mephitica*, *M. scrutator*, etc.); mastoid and paroccipital processes very much reduced; mastoid bullæ very large and much inflated; (these two last characters give this part of the skull somewhat the appearance of the skull of *Spilogale*.) Sagittal crest high; dentition normal, with the exception of upper carnassial tooth, which is unusually large.

Remarks.—*Mephitis avia* needs comparison with but one form, its nearest geographical ally, *M. mephitica scrutator*. It differs very much from that form in many ways. The short tail, the broad palate without median spine, the large much inflated mastoid bullæ, and peculiarly shaped zygoma distinguishing it.

I have a fine adult female skunk from Denver, Indiana, that is in every way exactly like examples of *M. mephitica scrutator* from Massachusetts

and Connecticut. So that it is probable that the range of *M. avia* does not extend very far to the east of the type locality. Undoubtedly it is the form of the central prairie region, being replaced in the north by *M. hudsonica* and in the east by *M. mephitica scrutator*.

Scrutator apparently reaches the height of differentiation in Louisiana. The series of skunks from Cartville and Point aux Loups Springs, Acadia Parish, Louisiana, from which I selected the type of *M. mephitica scrutator*, shows about the proportion of tail to total length found in specimens from the central Atlantic States. They are smaller, however, than examples from Massachusetts and Connecticut, and have smaller, lighter skulls and weaker dentition. Although they do not approach very nearly the larger, shorter-tailed *M. avia* with its heavy peculiar skull, still it is possible that intergradation may take place somewhere.